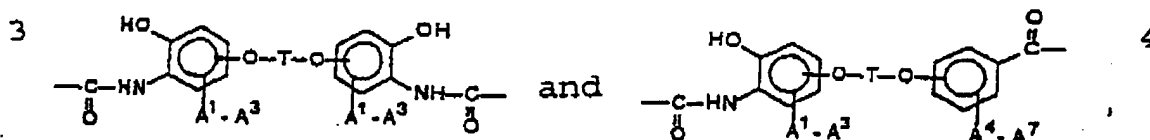


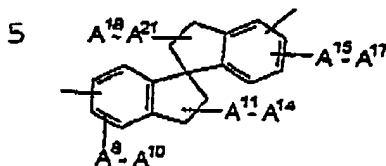
CLAIM AMENDMENTS

Claim 1 (original). A polybenzoxazole precursor comprising a partial structure selected from the group consisting of

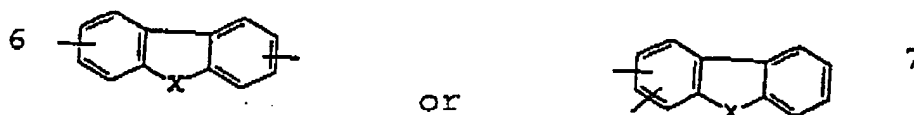


wherein each of A¹ to A⁷ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃, and OCF₃;

T is a residue selected from the group consisting of



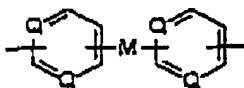
wherein each of A⁸ to A²¹ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃, and OCF₃;



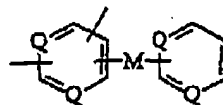
wherein X is selected from the group consisting of -CH₂-, -CF₂-, -C(CH₃)₂-, -C(CF₃)₂-, -C(OCH₃)₂-, -C(OCF₃)₂-, -

$C(CH_3)(C_6H_5)-$, $-C(C_6H_5)_2-$, $-O-$, $-(NH)-$, $-(N-CH_3)-$ and $-(N-C_6H_5)-$;

8



or



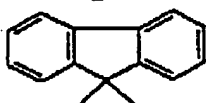
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wherein M is selected from the group consisting of residues represented by formulas 10-14

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or

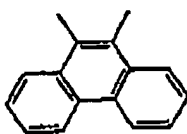
14



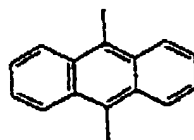
in which Q is selected from the group consisting of C-H, C-F, C-CH₃, C-CF₃, C-OCH₃, C-OCF₃ and N,

and residues represented by formulas 15-34 shown below:

15

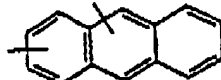
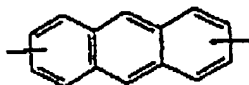


16

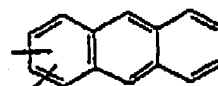


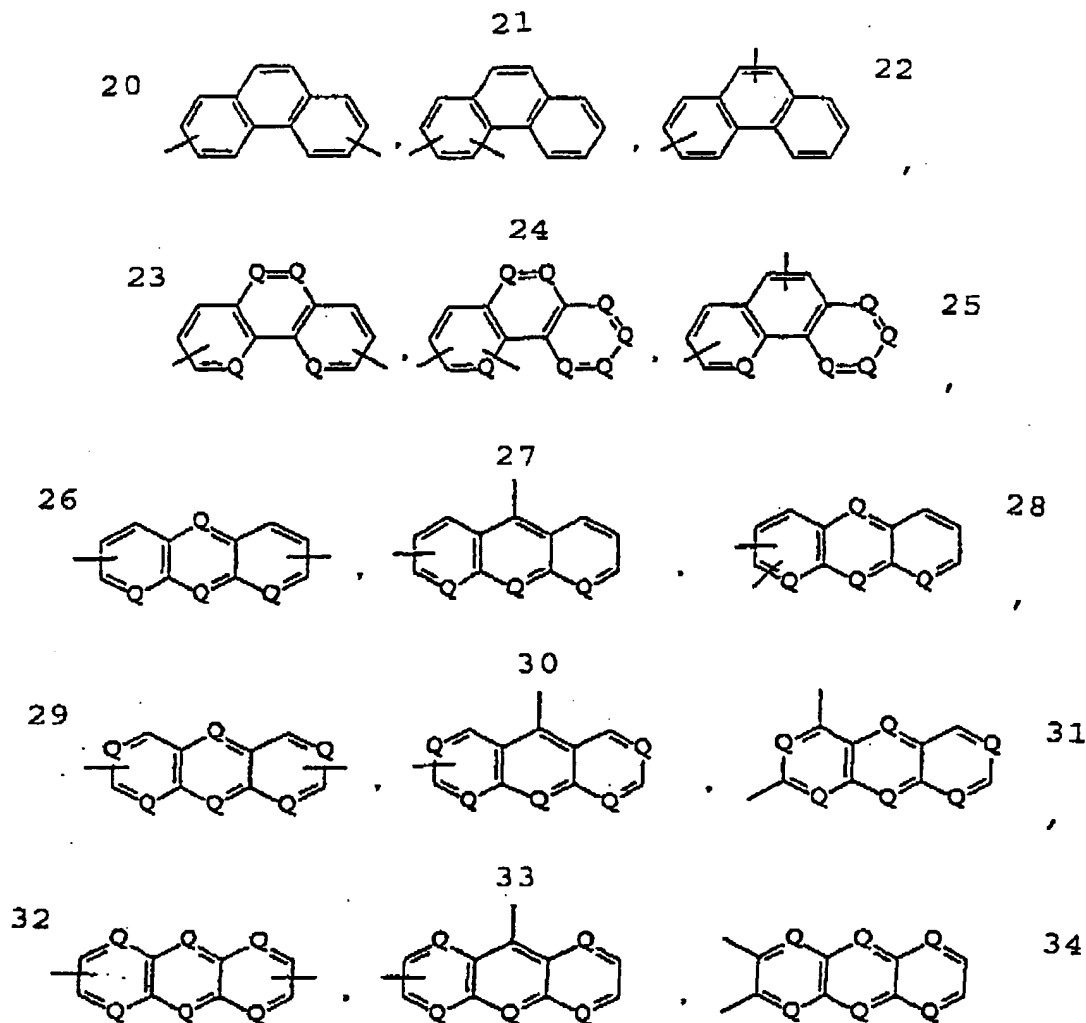
18

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wherein Q is defined as above, provided that at least one Q signifies N and a maximum of two N atoms are present per ring.

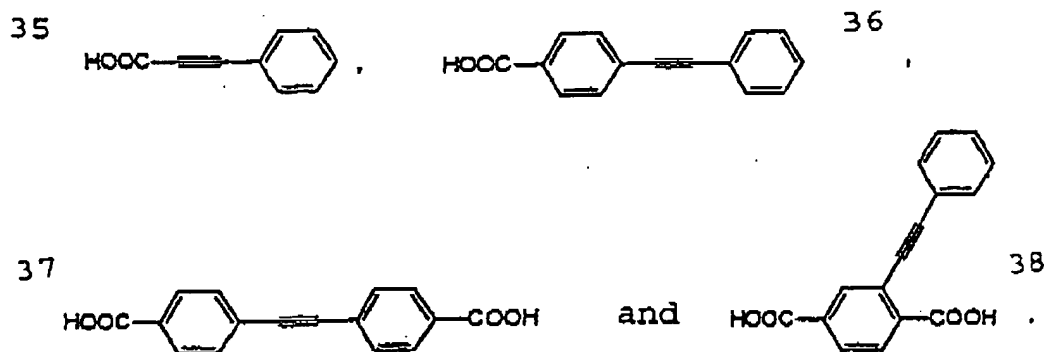
Claim 2 (original). The polybenzoxazole precursor of claim 1, further comprising at least one acetylene group.

Claim 3 (original). The polybenzoxazole precursor of claim 2, wherein said acetylene group is present in the main chain.

Claim 4 (original). The polybenzoxazole precursor of claim 2, wherein said acetylene group is present in a side chain.

Claim 5 (original). The polybenzoxazole precursor of claim 2, wherein said acetylene group is present in a chain terminating group.

Claim 6 (original). The polybenzoxazole precursor of claim 2, wherein said acetylene group is present in the residue of a carboxylic acid selected from the group consisting of

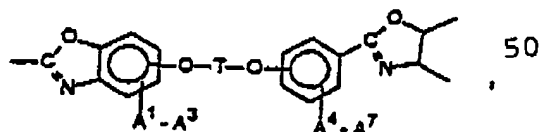
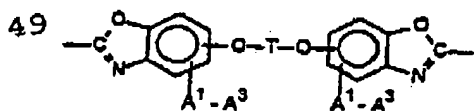


Claim 7 (original). A photoresist solution, comprising a polybenzoxazole precursor of claim 1, a diazoketone photoactive component, and an organic solvent.

Claim 8 (original). The photoresist solution of claim 7, wherein the weight ratio of polybenzoxazole precursor to diazoketone is in the range from 1:20 to 20:1.

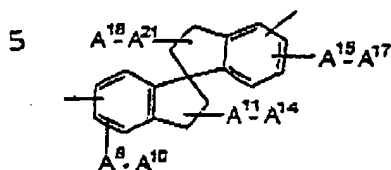
Claim 9 (original). The photoresist solution of claim 8, wherein a weight ratio of polybenzoxazole precursor to diazoketone is in a range from 1:10 to 10:1

Claim 10 (currently amended). A polybenzoxazole containing a partial structure selected from the group consisting of

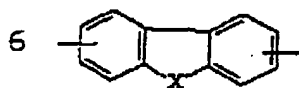


wherein each of A¹ to A⁷ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃ and OCF₃; and

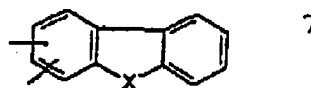
T is a residue selected from the group consisting of the residues represented by the following formulas ~~5-34~~ defined above



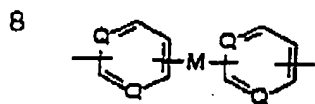
wherein each of A⁸ to A²¹ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃ and OCF₃;



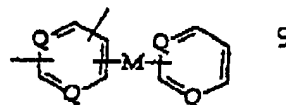
or



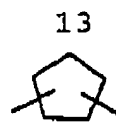
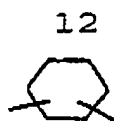
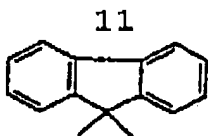
wherein X is selected from the group consisting of -CH₂-, -CF₂-, -C(CH₃)₂-, -C(CF₃)₂-, -C(OCH₃)₂-, -C(OCF₃)₂-, -C(CH₃)(C₆H₅)-, -C(C₆H₅)₂-, -O-, -(NH)-, -(N-CH₃)- and -(N-C₆H₅)-



or



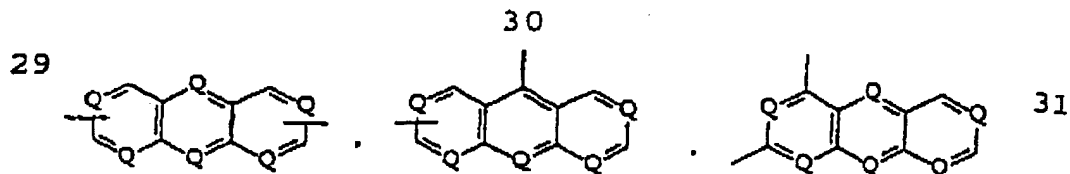
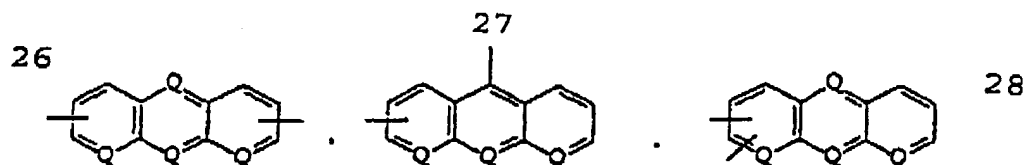
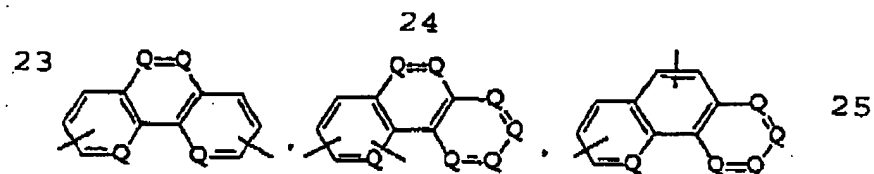
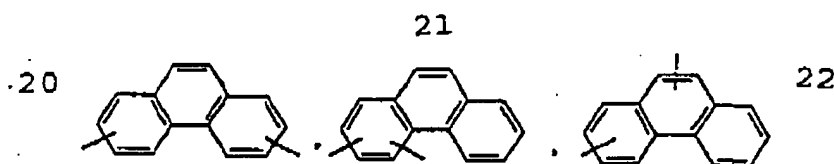
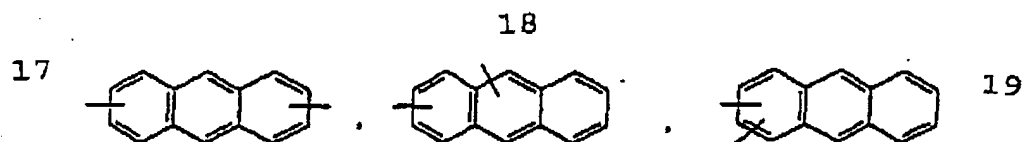
wherein M is selected from the group consisting of residues represented by formulas 10-14

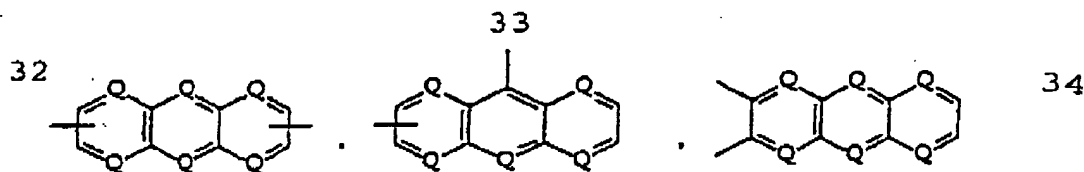


or

in which Q is selected from the group consisting of C-H, C-F, C-CH₃, C-CF₃, C-OCH₃, C-OCF₃ and N,

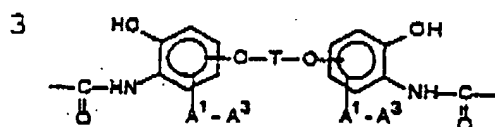
) and residues represented by formulas 15-34 shown below:





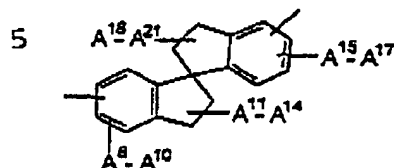
wherein Q is defined as above, provided that at least one Q signifies N and a maximum of two N atoms are present per ring.

Claim 11 (currently amended). The polybenzoxazole precursor of claim 1, wherein said partial structure is

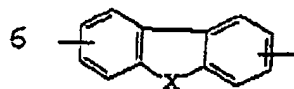


wherein each of A¹ to A³ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃ and OCF₃; and

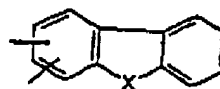
T is a residue selected from the group consisting of the residues represented by the following formulas ~~5-34~~ defined above



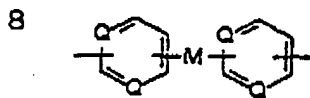
wherein each of A⁸ to A²¹ is a univalent substituent independently selected from the group consisting of H, F, CH₃, CF₃, OCH₃ and OCF₃;



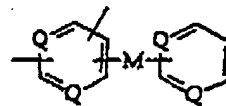
or



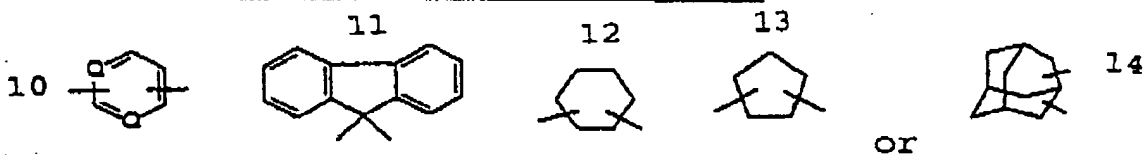
wherein X is selected from the group consisting of $-\text{CH}_2-$, $-\text{CF}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{C}(\text{CF}_3)_2-$, $-\text{C}(\text{OCH}_3)_2-$, $-\text{C}(\text{OCF}_3)_2-$, $-\text{C}(\text{CH}_3)(\text{C}_6\text{H}_5)-$, $-\text{C}(\text{C}_6\text{H}_5)_2-$, $-\text{O}-$, $-(\text{NH})-$, $-(\text{N}-\text{CH}_3)-$ and $-(\text{N}-\text{C}_6\text{H}_5)-$;



or

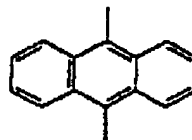
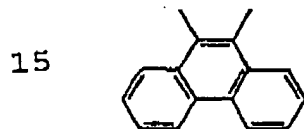


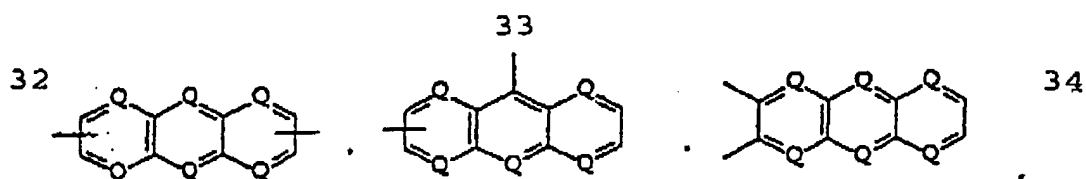
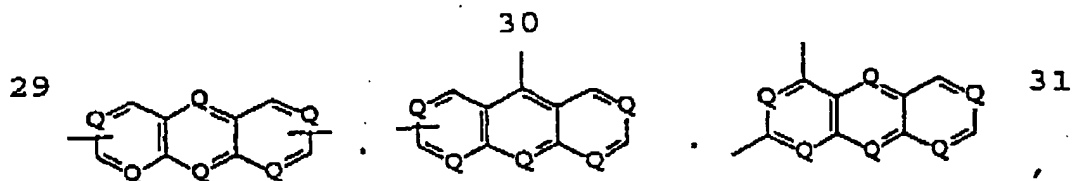
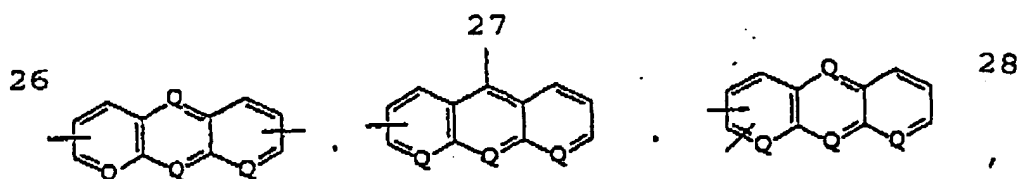
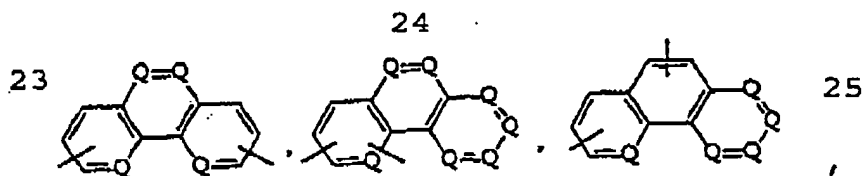
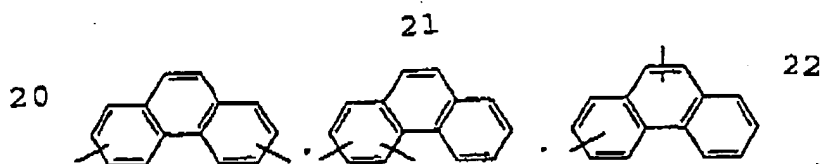
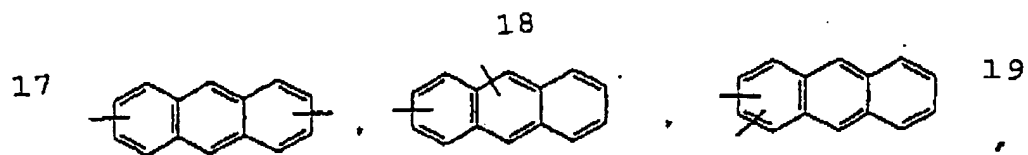
wherein M is selected from the group consisting of residues represented by formulas 10-14



in which Q is selected from the group consisting of C-H, C-F, C-CH₃, C-CF₃, C-OCH₃, C-OCF₃ and N,

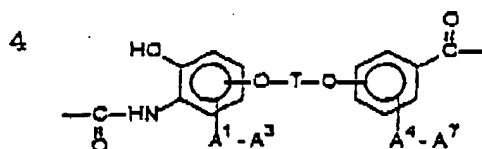
and residues represented by formulas 15-34 shown below:





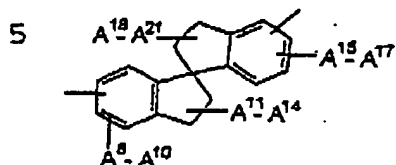
wherein Q is defined as above, provided that at least one Q signifies N and a maximum of two N atoms are present per ring.

Claim 12 (currently amended). The polybenzoxazole precursor of claim 1, wherein said partial structure is

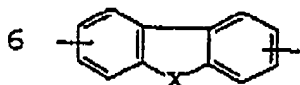


wherein each of A^1 to A^7 is a univalent substituent independently selected from the group consisting of H, F, CH_3 , CF_3 , OCH_3 and OCF_3 ; and

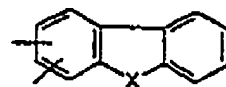
T is a residue selected from the group consisting of the residues represented by the following formulas ~~5-34~~ defined above



wherein each of A^8 to A^{21} is a univalent substituent independently selected from the group consisting of H, F, CH_3 , CF_3 , OCH_3 and OCF_3 ;

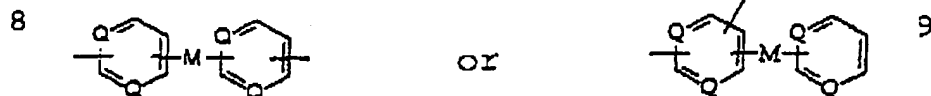


or

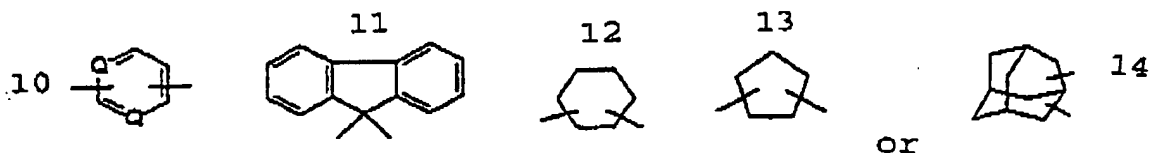


wherein X is selected from the group consisting of $-\text{CH}_2-$, $-\text{CF}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{C}(\text{CF}_3)_2-$, $-\text{C}(\text{OCH}_3)_2-$, $-\text{C}(\text{OCF}_3)_2-$, -

$C(CH_3)(C_6H_5)-$, $-C(C_6H_5)_2-$, $-O-$, $-(NH)-$, $-(N-CH_3)-$ and $-(N-C_6H_5)-$;

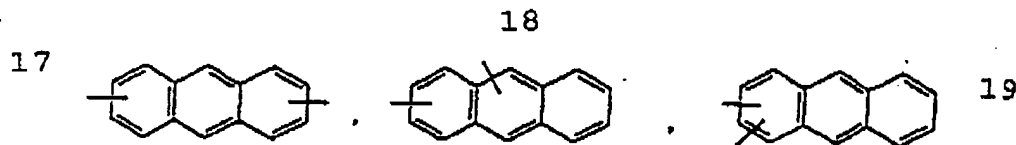


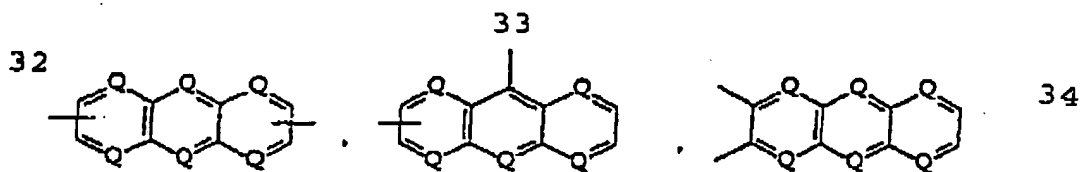
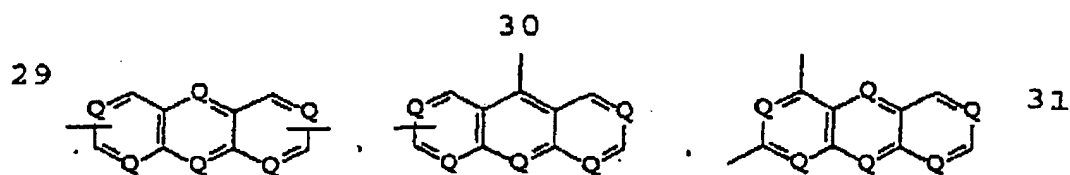
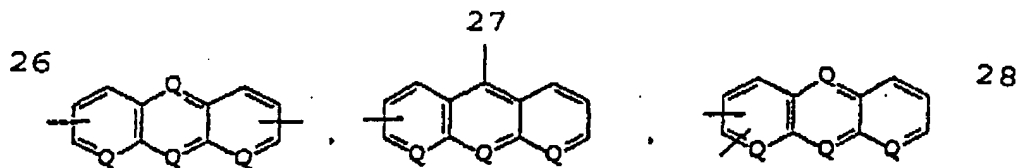
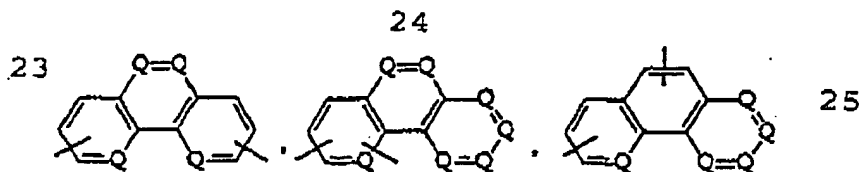
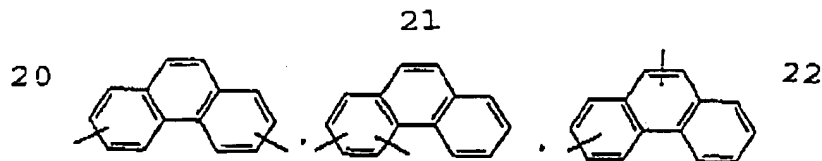
wherein M is selected from the group consisting of residues represented by formulas 10-14



in which Q is selected from the group consisting of C-H, C-F, C-CH₃, C-CF₃, C-OCH₃, C-OCF₃ and N,

and residues represented by formulas 15-34 shown below:

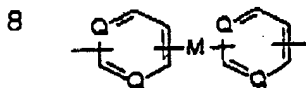




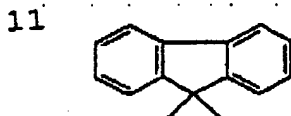
wherein Q is defined as above, provided that at least one Q signifies N and a maximum of two N atoms are present per ring.

) Claim 13 (original). The polybenzoxazole precursor of claim 1, wherein each of A¹ to A⁷ is H.

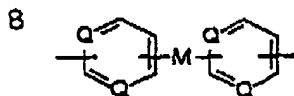
Claim 14 (original). The polybenzoxazole precursor of claim 1, wherein T is



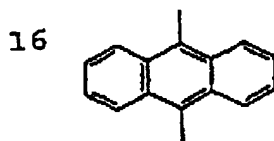
in which each Q is CH and M is



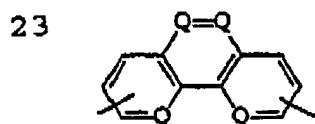
Claim 15 (original). The polybenzoxazole precursor of claim 1, wherein T is



in which each Q is CH and M is



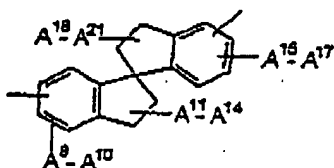
Claim 16 (original). The polybenzoxazole precursor of claim 1, wherein T is



) in which Q in each outside ring is N and each Q in the middle ring is CH.

Claim 17 (original). The polybenzoxazole precursor of claim 1, wherein T is

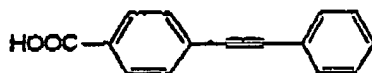
5



in which six of the substituents A^8 to A^{21} are CH_3 and the remainder of the substituents A^8 to A^{21} are H.

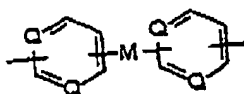
Claim 18 (original). The polybenzoxazole precursor of claim 5, wherein said chain terminating group is a residue of

36



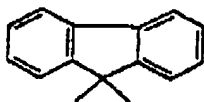
) Claim 19 (original). The polybenzoxazole precursor of claim 18, wherein T is

8



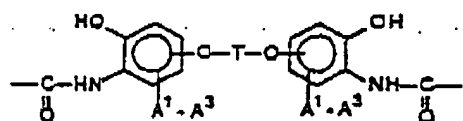
in which each Q is CH and M is

11

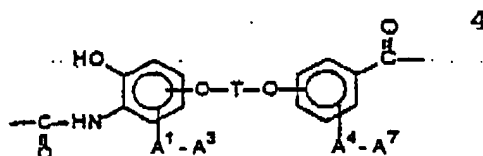


Claim 20 (original). A process for preparing a polybenzoxazole precursor containing a partial structure selected from the group consisting of

3



and



wherein each of A¹ to A⁷ and T are as defined above, comprising the steps of

providing at least one reactant selected from the group consisting of bis-o-aminophenols and o-aminophenolcarboxylic acids,

causing the reactant to react with at least one dicarboxylic acid compound,

mixing the reaction mixture with a precipitating agent to precipitate a solid polybenzoxazole precursor,

and isolating the polybenzoxazole precursor from the reaction mixture.